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NEWS 1		Web Page for STN Seminar Schedule - N. America
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NEWS 3	APR 03	CAS coverage of exemplified prophetic substances enhanced
NEWS 4	APR 07	STN is raising the limits on saved answers
NEWS 5	APR 24	CA/CAplus now has more comprehensive patent assignee information
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NEWS 7	APR 28	CAS patent authority coverage expanded
NEWS 8	APR 28	ENCOMPLIT/ENCOMPLIT2 search fields enhanced
NEWS 9	APR 28	Limits doubled for structure searching in CAS REGISTRY
NEWS 10	MAY 08	STN Express, Version 8.4, now available
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NEWS 13	MAY 14	DGENE, PCTGEN and USGENE enhanced with increased limits for exact sequence match searches and introduction of free HIT display format
NEWS 14	MAY 15	INPADOCDB and INPAFAMDB enhanced with Chinese legal status data
NEWS 15	MAY 28	CAS databases on STN enhanced with NANO super role in records back to 1992
NEWS 16	JUN 01	CAS REGISTRY Source of Registration (SR) searching enhanced on STN
NEWS 17	JUN 26	NUTRACEUT and PHARMAML no longer updated
NEWS 18	JUN 29	IMSCOPROFILE now reloaded monthly
NEWS 19	JUN 29	EPFULL adds Simultaneous Left and Right Truncation (SLART) to AB, MCLM, and TI fields
NEWS 20	JUL 09	PATDPAFULL adds Simultaneous Left and Right Truncation (SLART) to AB, CLM, MCLM, and TI fields
NEWS 21	JUL 14	USGENE enhances coverage of patent sequence location (PSL) data
NEWS 22	JUL 27	CA/CAplus enhanced with new citing references
NEWS 23	JUL 16	GBFULL adds patent backfile data to 1855
NEWS 24	JUL 21	USGENE adds bibliographic and sequence information
NEWS 25	JUL 28	EPFULL adds first-page images and applicant-cited references
NEWS 26	JUL 28	INPADOCDB and INPAFAMDB add Russian legal status data

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                                                       ENTRY    SESSION
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FILE COVERS 1907 - 5 Aug 2009  VOL 151 ISS 6
FILE LAST UPDATED: 4 Aug 2009  (20090804/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Jun 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Jun 2009

CAplus now includes complete International Patent Classification (IPC)
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of databases have been updated to include new citing references
information.  This enhancement may impact record import into
database management software.  For additional information, refer
to NEWS 22.

=> s copper and (inhibit near polymerization)
       1055590 COPPER
           517 COPPERS
       1055668 COPPER
                 (COPPER OR COPPERS)
```

```
        257769 INHIBIT
        159904 INHIBITS
        391850 INHIBIT
                  (INHIBIT OR INHIBITS)
        661594 NEAR
           385 NEARS
        661930 NEAR
                  (NEAR OR NEARS)
        377734 POLYMERIZATION
          4468 POLYMERIZATIONS
        378435 POLYMERIZATION
                  (POLYMERIZATION OR POLYMERIZATIONS)
        388627 POLYMN
         10499 POLYMNS
        390021 POLYMN
                  (POLYMN OR POLYMNS)
        524987 POLYMERIZATION
                  (POLYMERIZATION OR POLYMN)
             0 INHIBIT NEAR POLYMERIZATION
                  (INHIBIT(W)NEAR(W)POLYMERIZATION)
L1           0 COPPER AND (INHIBIT NEAR POLYMERIZATION)

=> s(inhibit near polymerization)
S(INHIBIT IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s(inhibit near polymerization)
S(INHIBIT IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s (inhibit near polymerization)
        257769 INHIBIT
        159904 INHIBITS
        391850 INHIBIT
                  (INHIBIT OR INHIBITS)
        661594 NEAR
           385 NEARS
        661930 NEAR
                  (NEAR OR NEARS)
        377734 POLYMERIZATION
          4468 POLYMERIZATIONS
        378435 POLYMERIZATION
                  (POLYMERIZATION OR POLYMERIZATIONS)
        388627 POLYMN
         10499 POLYMNS
        390021 POLYMN
                  (POLYMN OR POLYMNS)
        524987 POLYMERIZATION
                  (POLYMERIZATION OR POLYMN)
L2           0 (INHIBIT NEAR POLYMERIZATION)
                  (INHIBIT(W)NEAR(W)POLYMERIZATION)

=> s (polymerize or polymerization) and (inhibit or inhibitor)
         10299 POLYMERIZE
          3381 POLYMERIZES
         13406 POLYMERIZE
                  (POLYMERIZE OR POLYMERIZES)
        377734 POLYMERIZATION
```

```
          4468 POLYMERIZATIONS
        378435 POLYMERIZATION
                 (POLYMERIZATION OR POLYMERIZATIONS)
        388627 POLYMN
         10499 POLYMNS
        390021 POLYMN
                 (POLYMN OR POLYMNS)
        524987 POLYMERIZATION
                 (POLYMERIZATION OR POLYMN)
        257769 INHIBIT
        159904 INHIBITS
        391850 INHIBIT
                 (INHIBIT OR INHIBITS)
        622493 INHIBITOR
        612789 INHIBITORS
        962375 INHIBITOR
                 (INHIBITOR OR INHIBITORS)
L3       19901 (POLYMERIZE OR POLYMERIZATION) AND (INHIBIT OR INHIBITOR)

=> s l3 and copper
       1055590 COPPER
           517 COPPERS
       1055668 COPPER
                 (COPPER OR COPPERS)
L4         615 L3 AND COPPER

=> s l4 and oxygen
        894567 OXYGEN
          7720 OXYGENS
        899940 OXYGEN
                 (OXYGEN OR OXYGENS)
L5          36 L4 AND OXYGEN

=> s l5 and unsaturated and monomer
         60964 UNSATURATED
             1 UNSATURATEDS
         60965 UNSATURATED
                 (UNSATURATED OR UNSATURATEDS)
        246171 UNSATD
            13 UNSATDS
        246174 UNSATD
                 (UNSATD OR UNSATDS)
        262652 UNSATURATED
                 (UNSATURATED OR UNSATD)
        219876 MONOMER
        183373 MONOMERS
        349277 MONOMER
                 (MONOMER OR MONOMERS)
L6           3 L5 AND UNSATURATED AND MONOMER

=> d l6 1-3 abs ibib

L6   ANSWER 1 OF 3  CAPLUS  COPYRIGHT 2009 ACS on STN
AB   The method comprises pulverizing tar waste residue from production of catechol
     and hydroquinone and using the pulverized tar residue alone or in
     combination with a copper salt, nitrogen-oxygen free
     radical compound, phenolic compound or amine as polymerization
     inhibitor of unsatd. compound monomer.  The
     above tar waste residue is composed of hydroquinone 1-15,
     2,2'-dihydroxydiphenyl ether 2-15, 4,2'-dihydroxydiphenyl ether 2-15,
     4,4'-dihydroxydiphenyl ether 1-10% and addnl. polyhydroxy Ph ether compds.
     with C, H and O contents of 60-75, 3-5 and 21-36%, resp.  The
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copper salt is copper sulfate, copper acetate, copper nitrate, copper dialkyldithiocarbamate, copper benzoate or copper stearate. The nitrogen-oxygen free radical compound is di-tert-Bu nitrogen-oxygen free radical compound or piperidine nitrogen-oxygen free radical compound The phenolic compound is hydroquinone, 4-methyl-6-tert-butylphenol, 4-tert-butyl-catechol or p-hydroxybenzyl ether. The amine compound is N-isopropyl-N'-phenyl-p-phenylenediamine, methylaniline, diphenylamine, benzidine, etc. The unsatd. compound monomer is allyl alc., vinyl acetate, allyl acetate, acrolein, methylacrolein, acrylic acid, methacrylic acid, acrylate, methacrylate, acrylonitrile, styrene, divinylbenzene, chloroethylene, cinnamic alc., cinnamic acid or cinnamaldehyde. The method can reduce discharge of tar waste residue, lower energy consumption, reduce pollution to environment. The polymerization inhibitor has good effect and low cost.

ACCESSION NUMBER: 2008:997489 CAPLUS
DOCUMENT NUMBER: 149:334467
TITLE: Method for reutilization of tar waste residues from production of catechol and hydroquinone
INVENTOR(S): Cui, Yao; Xu, Ning; Tang, Yong; Zhang, Chunlei; Ma, Jianxue
PATENT ASSIGNEE(S): Shanghai Huayi Acrylic Acid Co., Ltd., Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 10pp. CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 101240169	A	20080813	CN 2008-10034423	20080310
PRIORITY APPLN. INFO.:			CN 2008-10034423	20080310

L6 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN

AB The invention provides a composition comprising: (a) a star polymer comprising: (i) a core portion comprising a polyvalent (meth)acrylic monomer , oligomer or polymer thereof or a polyvalent divinyl non-acrylic monomer, oligomer or polymer thereof; and (ii) at least two arms of polymerized alkyl(meth)acrylate ester; and (b) an oil of lubricating viscosity, wherein the core portion further comprises a functional group (I): -CH2-C(R1)(C(= O)A)-Y-(I) , wherein R1 is hydrogen, a linear or branched alkyl group containing 1 to 5 carbon atoms; A is nitrogen or oxygen; and Y is a free radical leaving group selected from the group consisting of one or more atoms or groups of atoms which may be transferred by a radical mechanism under the polymerization conditions, a halogen, an -O-N= group and an -S-C(= S)- group. The invention further provides the use of the composition in an oil of lubricating viscosity as a dispersant, a viscosity modifier or a precursor to a dispersant viscosity modifier.

ACCESSION NUMBER: 2007:1179276 CAPLUS
DOCUMENT NUMBER: 147:471843
TITLE: Star polymers and compositions thereof
INVENTOR(S): Visger, Daniel C.; Davies, Mark; Price, David; Baum, Marina; Schober, Barton J.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 20pp., Cont.-in-part of Appl. No. PCT/US2005/038146. CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070244018	A1	20071018	US 2007-738572	20070423
WO 2006047398	A2	20060504	WO 2005-US38146	20051021
WO 2006047398	A3	20060810		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2004-621875P P 20041025
WO 2005-US38146 A2 20051021
OTHER SOURCE(S): MARPAT 147:471843

L6 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN

AB Materials for making apparatus and a method of inhibiting polymerization during manufacture, purification, handling and storage of ethylenically unsatd. monomers are described. In particular, copper or metals containing copper, in the presence of oxygen, inhibit undesired polymerization resulting in polymer fouling in apparatus used during the manufacture, purification, handling, and storage of the monomers, such as acrylic acid, methacrylic acid, acrylic acid esters, methacrylic acid esters, etc. The copper or copper alloys in the presence of an oxygen-containing gas exhibit self-inhibiting surface characteristics when used to make at least a portion of the apparatus to inhibit polymerization of the monomers in contact with the portion of the apparatus including such copper-containing metal.

ACCESSION NUMBER: 2005:395245 CAPLUS
DOCUMENT NUMBER: 142:430735
TITLE: Copper metal or alloy surfaces and oxygen to inhibit ethylenically unsaturated monomer polymerization in processing apparatus
INVENTOR(S): Aldrett-Lee, Salvador; Allen, Diane Elisabeth; Fruchey, Olan Stanley; Roundy, Roger L.; Wang, Tao
PATENT ASSIGNEE(S): Dow Global Technologies Inc., USA
SOURCE: PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005040084	A1	20050506	WO 2003-US30076	20030924
W: CA, JP, MX, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
EP 1667953	A1	20060614	EP 2003-754867	20030924

```
     EP 1667953          B1    20081210
        R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK
     JP 2007521242       T     20070802    JP 2005-509905          20030924
     AT 417032           T     20081215    AT 2003-754867          20030924
     MX 2006003342       A     20060608    MX 2006-3342            20060324
     US 20080228002      A1    20080918    US 2006-571797          20060719
PRIORITY APPLN. INFO.:                      WO 2003-US30076     W  20030924


=> s l5 and unsaturated
         60964 UNSATURATED
             1 UNSATURATEDS
         60965 UNSATURATED
                   (UNSATURATED OR UNSATURATEDS)
        246171 UNSATD
            13 UNSATDS
        246174 UNSATD
                   (UNSATD OR UNSATDS)
        262652 UNSATURATED
                   (UNSATURATED OR UNSATD)
L7           3 L5 AND UNSATURATED

=> s l5 and acrylic
ACRYLIC IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l5 and acrylic
        317736 ACRYLIC
          1476 ACRYLICS
        318140 ACRYLIC
                   (ACRYLIC OR ACRYLICS)
L8          16 L5 AND ACRYLIC

=> s l8 and pd<20040900
      24978596 PD<20040900
                   (PD<20040900)
L9           9 L8 AND PD<20040900

=> d l9 1-9 abs ibib

L9   ANSWER 1 OF 9  CAPLUS  COPYRIGHT 2009 ACS on STN
AB   A method is described which produces acrylic acid in a high
     yield while maintaining the conditions for purifying acrylic
     acid in constant ranges and preventing the acrylic acid from
     polymerization  By using a reactor which has a first reaction zone and a
     second reaction zone formed of different reaction tubes, propylene
concentration
     adjusting, from 7-15 volume%, and water concentration adjusting, from 0-10
volume%,
     are introduced thereby obtaining an acrolein-containing gas which is subjected
     to reoxidn. to produce an acrylic acid-containing gas.  Then the
     acrylic acid-containing gas is introduced into an acrylic
     acid absorption column to adjust the water concentration in the range of 1-45%,
     thereby preventing it from polymerization  A process flow diagram is
     presented.
ACCESSION NUMBER:         2004:117247  CAPLUS
DOCUMENT NUMBER:          140:164344
TITLE:                    Oxidative method for production of acrylic
                          acid from propylene and oxygen
```

INVENTOR(S): Hirao, Harunori; Matsumoto, Yukihiro; Sanada, Kenji; Nishimura, Takeshi
PATENT ASSIGNEE(S): Nippon Shokubai Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 21 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1388533	A1	20040211	EP 2003-254931	20030807 <--
EP 1388533	B1	20080618		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004067615	A	20040304	JP 2002-231448	20020808 <--
US 20040063998	A1	20040401	US 2003-633170	20030801 <--
US 7109372	B2	20060919		
KR 2004014280	A	20040214	KR 2003-54129	20030805 <--
IN 2003KO00420	A	20050916	IN 2003-KO420	20030805
TW 259176	B	20060801	TW 2003-92121431	20030805
CN 1480442	A	20040310	CN 2003-127421	20030806 <--
CN 100341841	C	20071010		

PRIORITY APPLN. INFO.: JP 2002-231448 A 20020808
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN
AB A method is described which produces acrylic acid in a high yield as maintaining the conditions for purifying acrylic acid in constant ranges and preventing the acrylic acid from polymerization By using a reactor which has first reaction zone and second reaction zone formed of different reaction tubes, propylene concentration adjusting in the range of 7-15 volume% and water concentration adjusting in the range of 0-10 volume% are introduced thereby obtaining an acrylic acid-containing gas. Then the gas is introduced to an acrylic acid absorption column to adjust water concentration in the range of 1-45%, thereby preventing it from polymerization Process flow diagrams are presented.
ACCESSION NUMBER: 2004:117246 CAPLUS
DOCUMENT NUMBER: 140:164343
TITLE: Oxidative method for production of acrylic acid from propylene and oxygen
INVENTOR(S): Hirao, Harunori; Tanimoto, Michio
PATENT ASSIGNEE(S): Nippon Shokubai Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1388532	A1	20040211	EP 2003-254930	20030807 <--
EP 1388532	B1	20080618		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2004067616	A	20040304	JP 2002-231449	20020808 <--

JP 3908118	B2	20070425			
US 20040030185	A1	20040212	US 2003-632762	20030801	<--
US 7038079	B2	20060502			
KR 2004014281	A	20040214	KR 2003-54130	20030805	<--
CN 1480441	A	20040310	CN 2003-127420	20030806	<--
SG 120111	A1	20060328	SG 2003-4220	20030806	
BR 2003002812	A	20050503	BR 2003-2812	20030808	

PRIORITY APPLN. INFO.: JP 2002-231449 A 20020808
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AB The method preventing the clogging of an apparatus having a gas-phase part and/or liquid-phase part connected through a nozzle or piping to a measuring device for monitoring the process state of the (meth)acrylic acid and ester, comprises introducing a gas comprising at least one of an inert gas, oxygen, and a gas as polymerization inhibitor into the nozzle or piping connected to the gas-phase part of the apparatus at a flow rate of 0.03-1 m/s and introducing a liquid medium into the nozzle or piping connected to the liquid-phase part of the apparatus at a flow rate of 0.03-1 m/s. Thus, the apparatus for handling (meth) acrylic acid and the like can be stably and efficiently operated and the cost of the production or storage of (meth)acrylic acid can be reduced.

ACCESSION NUMBER: 2003:551483 CAPLUS
DOCUMENT NUMBER: 139:101526
TITLE: Method of preventing clogging of apparatus for handling (meth)acrylic acid and ester thereof
INVENTOR(S): Yada, Shuhei; Jinno, Kimikatsu; Ogawa, Yasushi; Suzuki, Yoshiro
PATENT ASSIGNEE(S): Mitsubishi Chemical Corporation, Japan
SOURCE: PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
WO 2003057658	A1	20030717	WO 2003-JP63	20030108	<--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
JP 2003267919	A	20030925	JP 2003-1290	20030107	<--
JP 3970183	B2	20070905			
AU 2003201911	A1	20030724	AU 2003-201911	20030108	<--
CN 1701058	A	20051123	CN 2003-801972	20030108	
CN 100413841	C	20080827			
US 20040231722	A1	20041125	US 2004-879228	20040630	

PRIORITY APPLN. INFO.: JP 2002-1231 A 20020108

WO 2003-JP63 W 20030108
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L9 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN
AB The production of acrylic acid by the heterogeneously catalyzed gas-phase partial oxidation of ≥1 C3 precursor(s) or C3 compd(s). (e.g., propylene) with mol. oxygen is described, where one cools the product-containing gas mixture and then subjects it to either a fractionating condensation or to a rectification process and adds phenothiazine and at least 1 phenolic polymerization-inhibiting compd(s). in the column head or in the range of the column head of the rectification and/or condensation columns.
ACCESSION NUMBER: 2002:484673 CAPLUS
DOCUMENT NUMBER: 137:47601
TITLE: Procedure for the manufacture of acrylic acid by the partial oxidation of C3 precursors or C3 molecules
INVENTOR(S): Hammon, Ulrich; Nestler, Gerhard; Schroeder, Juergen
PATENT ASSIGNEE(S): BASF A.-G., Germany
SOURCE: Ger. Offen., 8 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10064641	A1	20020627	DE 2000-10064641	20001222 <--
WO 2002051784	A1	20020704	WO 2001-EP15207	20011221 <--
W: BR, CN, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				

PRIORITY APPLN. INFO.: DE 2000-10064641 A 20001222
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L9 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN
AB The invention concerns a method for stabilizing acrylic monomers in a distillation column, comprising the following steps: adding ≥1 stabilizing agent for acrylic monomers having a total concentration in the liquid phase ranging between 1 ppm and 5000 ppm; injecting oxygen in the distillation column with a O2/organic vapor mol ratio ranging between 0.01 and 1%; adding a sequestering agent for metals such as pentasodium diethylenetriaminepentaacetate at concentration in the liquid phase ranging between 0.1 and 1000 ppm. The sequestering agent improves the stability of the acrylic monomers during the distillation
ACCESSION NUMBER: 2002:256211 CAPLUS
DOCUMENT NUMBER: 136:279841
TITLE: Method for stabilizing acrylic monomers
INVENTOR(S): Lepizzera, Stephane
PATENT ASSIGNEE(S): ATOFINA, Fr.
SOURCE: PCT Int. Appl., 17 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

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     WO 2002026685         A1    20020404    WO 2001-FR2965          20010925 <--
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
             US, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     FR 2814741            A1    20020405    FR 2000-12422           20000929 <--
     FR 2814741            B1    20040227
     AU 2001091986         A     20020408    AU 2001-91986           20010925 <--
     EP 1324969            A1    20030709    EP 2001-972199          20010925 <--
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2004513089         T     20040430    JP 2002-531072          20010925 <--
     CN 1531521            A     20040922    CN 2001-816605          20010925
     CN 1250509            C     20060412
     KR 806558             B1    20080227    KR 2003-704262          20030325
     US 20040011638        A1    20040122    US 2003-381795          20030716 <--
PRIORITY APPLN. INFO.:                         FR 2000-12422       A   20000929
                                               WO 2001-FR2965      W   20010925
REFERENCE COUNT:          6      THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
                                 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9   ANSWER 6 OF 9  CAPLUS  COPYRIGHT 2009 ACS on STN
AB   The invention concerns a method for purifying a (meth)acrylic
     monomer selected among (meth)acrylic acids and their esters, by
     distillation in the presence of ≥1  polymerization inhibitor
     requiring input of oxygen and/or an inhibitor having
     better efficacy in the presence of oxygen for stabilizing the
     liquid phase.  The invention is characterized in that the distillation is
     performed in the presence of a NO2 gas, with an oxygen-organic
     vapor ratio ranging between 0.02 and 3%, and with a NO2-condensed organic
     vapor ratio ranging between 0.01 and 50 ppm.
ACCESSION NUMBER:         2001:396825  CAPLUS
DOCUMENT NUMBER:          135:5974
TITLE:                    Method for purifying (meth)acrylic monomers
                          by distillation
INVENTOR(S):              Fauconet, Michel; Lepizzera, Stephane
PATENT ASSIGNEE(S):       ATOFINA, Fr.
SOURCE:                   PCT Int. Appl., 16 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 French
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.            KIND   DATE        APPLICATION NO.         DATE
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     WO 2001038285         A1     20010531    WO 2000-FR3172          20001115 <--
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     FR 2801306            A1     20010525    FR 1999-14777           19991124 <--
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FR 2801306	B1	20011228			
EP 1232138	A1	20020821	EP 2000-979736		20001115 <--
EP 1232138	B1	20051019			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
JP 2003532631	T	20031105	JP 2001-539842		20001115 <--
JP 4131005	B2	20080813			
CN 1220670	C	20050928	CN 2000-816268		20001115
US 7029556	B1	20060418	US 2002-130989		20020930
PRIORITY APPLN. INFO.:			FR 1999-14777	A	19991124
			WO 2000-FR3172	W	20001115

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AB A method for refining (meth)acrylic acid without polymn. during distillation comprises feeding a (meth)acrylic acid-containing solution (obtained by catalytic gas phase oxidation of propylene and/or acrolein) to a distillation column with the total concentration of C2-4 aldehydes and acetone maintained at ≤2000 ppm based on the (meth) acrylic acid. Preferably the oxidation mixture contains isobutylene, tert-BuOH, and/or methacrolein. Using mol. oxygen and a polymerization inhibitor in the distillation further prevented polymerization Thus, acrylic acid containing acetaldehyde 30, acrolein 30, acetone 30, and phenothiazine 100 ppm was distilled at column bottom temperature 88° and 100 mmHg showing no polymer formation after 8 h stable operation, compared with flooding within 1 h with 4800, 4900, 5100, and 100 ppm of the resp. compds. were present in the acrylic acid.

ACCESSION NUMBER:	2000:705081 CAPLUS
DOCUMENT NUMBER:	133:282192
TITLE:	Purified (meth)acrylic acid and polymerization inhibition in method therefor
INVENTOR(S):	Sakamoto, Kazuhiko; Ueno, Kouji; Nakahara, Sei; Ueoka, Masatoshi
PATENT ASSIGNEE(S):	Nippon Shokubai Co., Ltd., Japan; Nippon Catalytic Chem. Ind.
SOURCE:	Eur. Pat. Appl., 10 pp. CODEN: EPXXDW
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
EP 1041062	A2	20001004	EP 2000-302130		20000315 <--
EP 1041062	A3	20010117			
EP 1041062	B1	20030312			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
JP 2000290221	A	20001017	JP 1999-93859		19990331 <--
ZA 2000001377	A	20000906	ZA 2000-1377		20000317 <--
US 6540881	B1	20030401	US 2000-532225		20000322 <--
CN 1270952	A	20001025	CN 2000-105374		20000331 <--
CN 1183084	C	20050105			
PRIORITY APPLN. INFO.:			JP 1999-93859	A	19990331

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AB Tetrahydrobenzyl alc. (I) is esterified with (meth)acrylic acid in the presence of O2-containing gases and polymerization inhibitors of (1) (A) quinones, hindered phenols, nitrosoamines, and/or phenylenediamines or (B) phenothiazines, RR'NOH (R, R' = H, alkyl, aryl), Cu(S2CNR12)2 (R1 = alkyl, aryl), and/or Fe(S2CNR12)3 or (2) (A') hydroquinone, hydroquinone monomethyl ether (II), benzoquinone, 3,5-di-tert-butyl-4-hydroxytoluene (III), N-nitrosodiphenylamine, and/or N,N'-diphenylphenylenediamine or (B') phenothiazine, Cu(S2CNMe2)2 (IV), Cu(S2CNEt2)2, Cu(S2CNPr2)2, Fe(S2CNMe2)3, and/or Et2NOH, and the resulting crude solution is distilled with O2-containing gases and the above polymerization inhibitors for purification Alternatively, the esterification is carried out by using the gases and the inhibitors of A', and the resulting solution is distilled with the gases and the inhibitors of B'. Thus, a solution of I was bubbled with air and reacted with methacrylic acid in the presence of a catalyst and polymerization inhibitors of II and III. Then, the product solution after catalyst removal was refluxed with IV to give tetrahydrobenzyl methacrylate with yield 84%.

ACCESSION NUMBER: 1998:421476 CAPLUS
DOCUMENT NUMBER: 129:82071
ORIGINAL REFERENCE NO.: 129:16951a,16954a
TITLE: Manufacture of tetrahydrobenzyl (meth)acrylate by using polymerization inhibitors and oxygen gas for reaction efficiency
INVENTOR(S): Fujiwara, Keisuke
PATENT ASSIGNEE(S): Daicel Chemical Industries, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10175919	A	19980630	JP 1996-353733	19961218 <--
PRIORITY APPLN. INFO.:			JP 1996-353733	19961218

OTHER SOURCE(S): MARPAT 129:82071
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L9 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2009 ACS on STN

AB Acrylic and methacrylic acids are esterified (using a standard acid catalyst) in the presence of a Cu compound, a phenol, and O to prevent polymerization or discoloration of the ester. Thus, a mixture of 1,3-butanediol 45, acrylic acid 83, H2SO4 1.5, CuSO4.5H2O 0.02, and p-MeOC6H4OH (I) [150-76-5] 0.02 part in C6H6 was treated 6 hr at 78-85° with 50 ml/min air to give 81 parts 1,3-butanediol diacrylate [19485-03-1] containing 30 ppm I, no Cu, and no polymer. In the absence of air or I polymer was formed or the product was colored, resp. Similarly prepared are pentaerythritol acrylate [55919-77-2], trimethylolpropane triacrylate [15625-89-5], trimethylolethane trimethacrylate [24690-33-3], and a C10-C15 alkyl methacrylate mixture

ACCESSION NUMBER: 1976:463953 CAPLUS
DOCUMENT NUMBER: 85:63953
ORIGINAL REFERENCE NO.: 85:10303a,10306a
TITLE: Acrylates or methacrylates
INVENTOR(S): Kimura, Kaoru; Sakabe, Kazuyuki
PATENT ASSIGNEE(S): Toa Gosei Chemical Industry Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
JP 51029432	A	19760312	JP 1974-100567		19740903 <--
PRIORITY APPLN. INFO.:			JP 1974-100567	A	19740903

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